

Biology 565 – Conservation Biology – Spring 2011

Prof. Peter White

Syllabus

January

11 Logistics, Formats, Readings, Grading, Assignments; Introduction to Conservation Biology; The 12 Threads of Conservation Biology [*Chapter 1, 2*] [*Biology 565 Introduction, Conservation Biology introduction & the 12 Threads Slides*]

13 Ethics and philosophy 1: Grassy Balds...You decide! [*Grassy Bald Slides*] [*Class management votes and further notes*]

18 Ethics and philosophy 2: Toward a Conservation Ethic [*Chapter 3, 4*] [*Conservation Ethics Slides*]

20 Ethics and philosophy 3: Timeline of conservation in the U.S. [*Timeline Slides*]; History of change in Great Smoky Mts National Park [*Reading: Smokies Change*] [*Smokies Slides*]; The two triangles and a taxonomy of conservation goals [*Chapter 5*] [*Triangles, Goals Slides*].

25 Biodiversity: A Shifted Focus and Biodiversity and Ecosystem Function [*Chapter 6, 7, 8, 9*] [*Biodiversity Slides 1*] [*Phylogeny in conservation: references*]

27 Biodiversity, continued. [*Biodiversity Slides 2*]; Biodiversity in the Southeast [*Biodiversity example: Endemism in the Southeast*]

February

1 Biodiversity, concluded. [*Biodiversity and Ecosystem Function Slides*]

3 Foundation paradigms 1: Island Biogeography & related ideas [*Chapter 10, 11, 12*] [*IBT Slides*]

8 Foundation paradigms 2 [*Chapter 13, 24*] [*IBT Slides 2*]

10 Foundation paradigms 3: Island Biogeography concluded.

15 Genetics 1 [*Chapter 15, 16*] [*Conservation Genetics Slides*]

17 Genetics 2: Conservation genetics concluded.

22 Populations 1: [*Chapter 17, 18*] [*Population Slides 1*]

24 Populations 2: Populations concluded [*Population Slides 2*]

March

- 1 Metapopulations 1: *[Chapter 19, 20] [Metapopulation slides]*
- 3 Metapopulations 2: Metapopulations concluded
- 8 & 10 NO CLASS, *Spring Break!*
- 15 Invasive species *[Chapter 21, 22] [Invasive species slides]*
- 17 Invasive species continued
- 22 Rarity, ex situ conservation, reintroduction *[Chapter 23, 24, 25] [Conservation Garden Slides] [Rarity and ex situ Slides]*
- 24 Behavioral ecology *[Chapter 26] [Behavior Slides]*
- 29 Communities, ecosystems, landscapes 1: *[Chapter 27, 28] [Species Interactions Slides]*
- 31 Communities, ecosystems, landscapes 2: Species Interactions Concluded; Disturbance ecology *[Chapter 29, 30] [Disturbance 1 Slides] [Disturbance 2 Slides]*

April

- 5 Communities, ecosystems, landscapes 3: Disturbance ecology continued
- 7 Communities, ecosystems, landscapes 4: Disturbance ecology concluded *[Chapter 31] [Intermediate Disturbance Hypothesis Slides].*
- 12 Landscape ecology *[Chapter 32] [Landscape Ecology Slides]*
- 14 Fragmentation and Edges *[Chapter 33] [Fragmentation Slides]*
- 19 Ecosystems and Large Scale Conservation *[Chapter 34] [Ecosystem Slides]*
- 21 Ecological Restoration *[Chapter 35] [Restoration Slides]*
- 26 The Twelve Threads Revisited *[Chapter 36] [12 Threads Slides]; Conclusion [Chapter 37] [What Makes a Good Question Handout]*

May

- 3 Final Exam, 12-2 pm, F009 Fred Brooks-Sitterson (our regular classroom)